









# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/678,423	10/02/2000	John M Boyd	LAM2P206	4367
75	90 01/14/2004	,	EXAMINER	
Albert S Penilla			SHAKERI, HADI	
Martine Penilla	& Kim LLP			<del></del>
710 Lakeway Drive			ART UNIT	PAPER NUMBER
Suite 170			3723	
Sunnyvale, CA 94085			DATE MAILED: 01/14/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

5			<u></u>	Ų			
•		Application No.	Applicant(s)				
Office Action Summary		09/678,423	BOYD ET AL.				
		Examiner	Art Unit				
		Hadi Shakeri	3723				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet	with the correspondence address				
THE - Exte after - If the - If NO - Failt - Any	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period of the toreply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may y within the statutory minimum of t will apply and will expire SIX (6) May cause the application to become	a reply be timely filed  nirty (30) days will be considered timely.  DNTHS from the mailing date of this communicat  ABANDONED (35 U.S.C. § 133).	ion.			
1)[	Responsive to communication(s) filed on	<u>_</u> .					
2a)⊠	This action is <b>FINAL</b> . 2b) This	action is non-final.					
3)	Since this application is in condition for alloward closed in accordance with the practice under E	nce except for formal ma Ex parte Quayle, 1935 C	atters, prosecution as to the merits D. 11, 453 O.G. 213.	is			
Disposit	ion of Claims						
4)⊠	Claim(s) 25,26 and 42-59 is/are pending in the	application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)🖂	∑ Claim(s) <u>25,26,42,43,58 and 59</u> is/are allowed.						
6)⊠	☑ Claim(s) <u>44-57</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restriction and/o	r election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	er.					
10)⊠	The drawing(s) filed on 27 August 2001 is/are:	a) accepted or b) ⊠	objected to by the Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abey	ance. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	tion is required if the drawin	g(s) is objected to. See 37 CFR 1.121	(d).			
11)	The oath or declaration is objected to by the Ex	caminer. Note the attach	ed Office Action or form PTO-152.				
Priority (	under 35 U.S.C. §§ 119 and 120						
* \$ 13)	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list Acknowledgment is made of a claim for domestince a specific reference was included in the first 7 CFR 1.78.  2) The translation of the foreign language processing the processing services and the processing services are the processing services.	s have been received. s have been received in rity documents have been (PCT Rule 17.2(a)). of the certified copies not priority under 35 U.S.0 st sentence of the specific priority under 35 U.S.0 st sentence of the specific priority under 35 U.S.0 st priority under 35 U.S.0	Application No In received in this National Stage of received. C. § 119(e) (to a provisional application or in an Application Data Sibeen received. C. §§ 120 and/or 121 since a speci	heet. fic			
Attachmen		_					
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice o	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)				

Art Unit: 3723

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

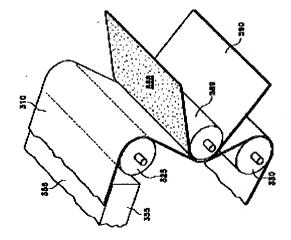
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 44-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Donohue et

al.

Donohue et al. discloses all the limitations of the above claims, i.e., a fixed abrasive pad (310), a web dressing media (590) having a contact surface defined between a first point and a second point (edges of the web), a feed roller, a take up roller (not shown, col. 17, line 30-45); a pressure application plate (589) may be in form of a flat bar, col. 20,



lines 10-13, applied to a surface opposite the contact surface. Wherein the pad is configured to move continuously in one direction, (embodiments with endless pad, col. 5, line 8, even though an indexing media would also meet the limitation, i.e., continuously moving in one direction during "operation"), and wherein the media is polished prior to applying a wafer, e.g., col. 19, lines 41-44 and applying the dressing media onto a non-flexing region.

Art Unit: 3723

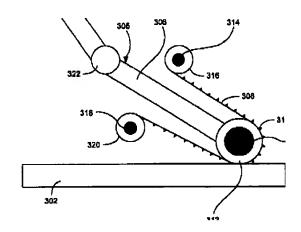
## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 51-54 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagahara et al.

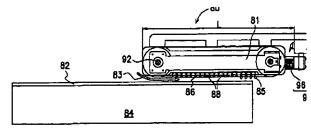
Nagahara et al. discloses all the limitations of the above claims, i.e., a polishing disk (302) or continuous feed or closed loop abrasive pad, col. 1, lines 10-12, a pressure application member (311) defined above the pad configured to apply a web dressing media (308) to the surface of the disk having feed and rake-up rollers defined above the disk having a stabilization member with an application arm and applying the dressing media onto a non-flexing region.



5. Claims 51, 52, 54 and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by

Liu.

Liu discloses all the limitations of the above claims, i.e., a polishing disk (82) a pressure application member defined above the pad configured to apply a web dressing



media (86) to the surface of the disk having feed and rake-up rollers defined above the disk having a stabilization member with an application arm and applying the dressing media onto a non-flexing region.

Page 4

Application/Control Number: 09/678,423

Art Unit: 3723

# Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 44-50, 55 and 57are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahara in view Donohue.

Nagahara meets all the limitations of the above claims except for disclosing a flat formed application plate and programmable indexing belt. Flat application plate and programmable indexing of the polishing web are taught by Donohue. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the inventions of Nagahara with a flat application plate and programmable indexing of the web in enhancing the operation.

8. Claims 44-50, 53, 55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view Donohue.

Liu meets all the limitations of the above claims except for disclosing a flat formed application plate, programmable indexing belt applying the invention to a fixed abrasive pad. Flat application plate and programmable indexing of the polishing web and applying the invention to a fixed abrasive pads are taught by Donohue. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the inventions of Liu by applying a flat application plate and programmable indexing of the web to a fixed abrasive pad in enhancing the dressing operation.

Art Unit: 3723

# Allowable Subject Matter

- **9.** Claims 25, 26, 42, 43, 58 and 59 are allowed.
- 10. The following is a statement of reasons for the indication of allowable subject matter: a "web" dressing media (as per specification is considered as broad recitation of a system having feed-roll and take-up roll thus defining a web dressing media) and the pressure application enclosed in a housing configured to rotate as per Figs. 4A and 4B, places these claims in condition for allowance.

#### Response to Arguments

**11.** Applicant's arguments filed 10/20/03 have been fully considered but they are not persuasive.

In response to applicant's argument that Donohue does not disclose a flat width plate, Applicant is directed to col. 20, lines 9-13. The argument regarding applying the media to a non-flexing region is not persuasive since a non-flexing region as defined by the specification as originally file, e.g., Fig. 2A-1 is met by prior art. As indicated in the previous Office Actions, Donahue does disclose embodiments where the pad is conditioned prior to use. And Donohue also discloses in the last paragraph applying the invention to different types of pads.

#### Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3723

Page 6

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM.

Unofficial documents may be faxed to the Examiner at (703) 746-3279.

Official documents should be faxed to (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.

Hadi Shakeri Patent Examiner January 10, 2004